District's Exhibit No. 4

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Before the

Council of the District of Columbia

COMMITTEE ON PUBLIC WORKS AND THE ENVIRONMENT

Enforceable Re-Routing of Hazmat Cargo Needed to Restore Security and Credibility

November 22, 2004

The vulnerability of shipments of extremely hazardous chemicals, particularly on freight trains, through Washington, D.C. represents one of the most serious risks we face from domestic terrorist attacks. A new estimate (attached) by the Homeland Security Council estimates that there could be 17,500 fatalities, 10,000 severe injuries and 100,000 hospitalizations from an attack on a chlorine tank car. They estimate that such a disaster could take place within 20 minutes.

An emergency bill offered by Council Member Kathleen Patterson at the November 9th Council Meeting was based on B15-0525 which was introduced on October 21, 2003 by Council Members Kathy Patterson (D), Carol Schwartz (R) and David Catania (I). This bill would have established an enforceable mechanism to verify that the most dangerous hazardous substances would be re-routed around Washington, D.C. unless: there is no safer practical alternative route; the shipment is destined for use in D.C.; an emergency requires passage through D.C.

Council Member Patterson's bill failed to get the necessary super-majority on November 9th because the Council was led to believe that these shipments have been voluntarily re-routed since the March 11th terrorist attacks on passenger trains in Madrid, Spain. If that is true, keeping it a secret for eight months has also undermined our security and safety. Everyone, including terrorists, should be informed if re-routing has begun, therefore eliminating a major vulnerability. For example the public was informed about the conversion of D.C.'s sewage treatment plant (Blue Plains) from chlorine to safer chemicals eight weeks after 9/11 which eliminated the threat posed by as many as seven chlorine rail cars on sight.

However, prior to the Madrid attacks, the Department of Homeland Security (DHS) and Transportation Security Administration (TSA) had not taken any formal action. They only convened their first work group meeting on this threat February 18, 2004 following the D.C. Council's January 23rd hearing.

It has been stated that this is a local concern and not a national issue. However, in an April 6, 2004 letter, TSA administrator Admiral Stone confirmed that the TSA's new working group was tasked with producing a written report which would **"serve as the baseline for shaping national policies in the transport of hazardous materials for other high rail traffic areas."**

We were also told that any re-routing around the District should remain secretive and voluntary to keep other cities from requesting equal protection. Neither of these rationalizations makes any sense. If re-routing has truly been going on since March, keeping it secret has allowed these trains to remain targets in the minds of would-be attackers throughout the summer. Even the bombing of an empty rail car could result in significant injury and death. The hostility toward other cities seeking similar action is inappropriate and irrelevant unless a lopsided agreement was reached that allows CSX

or DHS to hold the District hostage to "retribution" for taking enforceable action. Such threats build neither credibility nor confidence in our national and local security policies.

Furthermore, sources indicate that the voluntary re-routing may end at anytime, possibly after the inauguration or whenever unnamed security measures are installed at an estimated cost of $6 million. No measure short of re-routing will eliminate the risks posed by determined terrorists who can easily turn a rail car of chlorine into a weapon of mass destruction (WMD). Only by adopting enforceable re-routing legislation can we maintain safety with any certainty in the D.C. rail corridor.

It was also suggested that an October 29th letter to DHS' Secretary Tom Ridge from Representatives Norton (D-DC), Markey (D-MA) and Turner (D-TX) confirmed the claims of voluntary re-routing of this cargo. However, the bulk of that letter was devoted to raising concerns and questions about the federal government's opposition to re-routing. Their questions included:

*** "Please provide an explanation of why the Department did not consider rerouting as an option..."
*** "How much will the security plan DHS will soon announce for the Washington, DC area cost? Who will assume these costs? What is the target date for announcing the plan?"

Voluntary Re-Routing Ambiguity Leaves Many Serious Questions Unanswered

It was disclosed in October that CSX railroad may have been secretly re-routing shipments of hazardous materials such as chlorine since the March 11, 2004 terrorist attacks on commuter trains in Madrid, Spain. We can see no security reason in keeping such a positive development secret. However, voluntary action is voluntary and can be terminated at any time.

Early in October vague information surfaced about a possible agreement between federal agencies and CSX which may include an end to re-routing after implementing unspecified security enhancements along the District of Columbia rail corridor.

Many unanswered question remain:

1) If voluntary re-routing has or is occurring, which hazardous substances are including in the re-routing?
2) Is voluntary re-routing, other than during special events or high alerts, still continuing?
3) Under the current informal agreement with DHS, can CSX unilaterally resume these shipments at anytime?
4) If CSX resume hazardous shipments how and when will they notify the District of Columbia?
5) Has the DHS and other federal agencies such as the DOT monitored this activity to confirm what materials are re-routed and whether it is done 100 percent of the time?

6) If DHS has known about this why has it been kept secret? DHS and CSX are now open to the charge that they are using "empty" rail cars as "decoys" for terrorists.
7) If CSX has successfully re-routed this cargo for the last seven months, why hasn't the DHS pursued regulations to make this permanent and enforceable?
8) Is it true that this information was withheld to prevent other cities at risk from demanding similar protection?
9) When were D.C. City Council members first notified of any voluntary re-routing?

The media has reported that some federal officials and railroad representatives claim that re-routing these shipments will have a negative impact on commerce. However, CSX may have been doing it for seven months with no major negative impact on their business. In fact, the number of most dangerous materials that need to be re-routed is a small subset of the 8,500 rail cars of hazardous materials that CSX ships through D.C. each year. For example, only 10 toxic-by-inhalation substances are listed in the 150 most shipped hazardous substances according to a December 2000 DOT report by the Argonne National Laboratory.

New Information on the Magnitude of the Threat

A new estimate by the Homeland Security Council estimates that there could be 17,500 fatalities, 10,000 severe injuries and 100,000 hospitalizations from a chlorine tank car explosion. They estimate that such a disaster could take place within 20 minutes. However, they say, "the ability to prevent the attack is contingent on the prevention of weapons acquisition, specifically IEDS [improvised explosive devices] and site reconnaissance." This suggests a flawed policy of response rather than true prevention.

The chemical industry's disaster scenario for a 90-ton rail car of chlorine assumes a risk zone extending fourteen miles from the point of release. The U.S. Naval Research Laboratory testified before the D.C. City Council that 100,000 people could be killed or injured in the first 30 minutes following an attack with as many as 100 people dying per second.

The chemical industry's own disaster scenario for a 90-ton rail car of chlorine assumes a zone of risk extending fourteen miles from the point of release. Census data shows that 2.4 million D.C. area residents live in this risk zone. The U.S. Naval Research Laboratory testified before the D.C. City Council that 100,000 people could be killed or injured in the first 30 minutes following an attack with as many as 100 people dying per second. CSX tracks are shared with Amtrak, VRE and MARC trains and often run parallel to Metro rail.

Washington, D.C. eliminated a similar risk by converting its sewage treatment plant (Blue Plains) from chlorine eight weeks after the September 11, 2001 attacks. Until then Blue Plains had seven 90 ton rail cars of chlorine stored on site. Now there is no reason to ship 90 ton rail cars of chlorine into the District.

Re-Routing Is Cost Effective

In addition it has been suggested that re-routing is incurring significant costs to CSX. However no evidence has been presented to substantiate this claim. The economic impact of re-routing on CSX should be negligible. The number of most dangerous materials that should be re-routed is a small subset of the 8,500 rail cars of hazardous materials that CSX ships through D.C. each year. For example, only 10 toxic-by-inhalation substances are among the 150 most shipped by rail hazardous substances according to a December 2000 report by Argonne National Laboratory.

The Federal Government Is Not Credible on Re-Routing

The Bush administration has publicly opposed re-routing months prior to the completion of the DHS work group's recommendations. The Federal Railroad Administration's opposed re-routing at the January 23rd City Council hearing. On May 12th TSA Deputy Administrator McHale opposed re-routing in testimony before the House Select Committee on Homeland Security. By mid-July the long promised studies by TSA and DHS were completed but never released. Is there any doubt that the federal government dragged out negotiations with the District to forestall City Council action?

Federal Foot Dragging on Rail Security

In an April 6, 2004 letter to Greenpeace TSA administration Admiral Stone stated that this working group was **"established to explore and determine solutions in securing the District of Columbia rail corridor"** and that a **"written report"** would **"serve as the baseline for shaping national policies in the transport of hazardous materials..."** As a result, the D.C. City Council agreed to temporarily postpone action on re-routing legislation while the federal government explored options.

According to the TSA this working group had completed three projects by mid-May:
1) A vulnerability assessment
2) A buffer zone protection plan
3) A Hazard Analysis of Control Points (HACC) eg., the L'Enfant Plaza VRE station

Six months later, no public report has been issued and the D.C. City Council is left with one option, emergency legislation.

After Repeated Warnings Enforceable Action is Overdue

DHS Secretary Ridge and Attorney General Ashcroft this summer warned of new domestic terrorist attacks before the end of this year.

In October, 2003 an alleged al Qaeda "scout" was sentenced to 20 years for planning to derail trains in or near Washington, D.C. The impossibility of guarding every mile of railroad is vividly illustrated by the ubiquitous presence of graffiti on railroad cars,

tunnels and walls. British intelligence has used graffiti as an indicator of where the terrorists may have easier access to various targets in the UK.

In June, 2003 an FBI specialist on weapons of mass destruction (WMD), addressing a chemical industry conference on homeland security, warned, *"You've heard about sarin and other chemical weapons in the news. But it's far easier to attack a rail car full of toxic industrial chemicals than it is to compromise the security of a military base and obtain these materials."*

On October 24, 2002 the FBI warned that, "operatives may try a variety of other attack strategies, such as destroying key rail bridges and sections of track to cause derailments or targeting hazardous material containers. Recently captured al Qaeda photographs of U.S. railroad engines, cars, and crossings heighten the intelligence community's concern of this threat."

DC's Duty to Protect the Public Not Just VIPs

According to the railroads hazardous materials cargo were held back during VIP events such as the September, 2003 NFL Britney Spears concert on the Mall and the President's State of the Union message.

In October, 2001 following the September 11th attacks, U.S. and Canadian railroads imposed a 72 hour moratorium on shipping "poison by inhalation" substances. While this acknowledged the threat these shipments pose we continue to gamble with the lives of millions of Americans the rest of the days of the year.

Action by DC on Re-routing Will Restore Security & Credibility

It is long past the time to enact D.C. City Council bill (B15-0525) introduced in October 21, 2003 by Council members Kathy Patterson (D), Carol Schwartz (R) and David Catania (I). It is the only remaining option that can restore security to the rail corridor and credibility to the government's most basic role of protecting the citizens of D.C. and surrounding areas.

The bill would prohibit the transport of large quantities of extremely hazardous substances through D.C. unless:

- There is no safer practical alternative route.
- The shipment is destined for use in D.C.
- An emergency requires passage through D.C.

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Scenario 8: Chemical Attack – Chlorine Tank Explosion

Executive Summary

Casualties	17,500 fatalities; 10,000 severe injuries; 100,000 hospitalizations
Infrastructure Damage	In immediate explosions areas, and metal corrosion in areas of heavy exposure
Evacuations/Displaced Persons	Up to 70,000 (self evacuate)
Contamination	Primarily at explosion site, and if waterways are impacted
Economic Impact	Millions of dollars
Potential for Multiple Events	Yes
Recovery Timeline	Weeks

Scenario Overview:

General Description –

Chlorine gas is poisonous and can be pressurized and cooled to change it into a liquid form so that it can be shipped and stored. When released, it quickly turns into a gas and stays close to the ground and spreads rapidly. Chlorine gas is yellow-green in color and although not flammable alone, it can react explosively or form explosive compounds with other chemicals such as turpentine or ammonia.

In this scenario, the Universal Adversary (UA) infiltrates an industrial facility and stores a large quantity of chlorine gas (liquefied under pressure). Using a low-order explosive, UA ruptures a storage tank man-way, releasing a large quantity of chlorine gas downwind of the site. Secondary devices are set to impact first responders.

Timeline/Event Dynamics –

Total time to plan and prepare for the attack would be on the order of 2 years, including reconnaissance and weapons training, and accumulation of weapons. The actual infiltration, explosive charges setting, and ex-filtration would take less than 20 minutes. Except in very cold conditions, the release would be complete in less than an hour. The plume would travel downwind and be dispersed below the detection level in 6 hours. In order for the UA to succeed in this attack, certain meteorological conditions – wind speed, temperature, humidity, and precipitation – must be met.

Secondary Hazards/Events –
Authorities will shelter-in-place a significant area downwind of the site. Numerous injuries will result from population panic once downwind casualties begin to occur, and as many as 10% of the people will self-evacuate. Additional injuries are likely, due to motor vehicle accidents in the surrounding roadways. The rule of thumb is one fatality per 10,000 evacuated. Any local waterways or wetlands will absorb the chlorine gas, creating hydrochloric acid and lowering the acidity (potential of hydrogen, or pH) of the water.

Key Implications:

Assuming a high-density area, as many as 700,000 people may be in the actual downwind area, which could extend as far as 25 miles. Of these, 5% (35,000) will receive potentially lethal exposures, and half of these will die before or during treatment. An additional 15% will require hospitalization, and the remainder will be treated and released at the scene by Emergency Medical Service (EMS) personnel. However, approximately 450,000 "worried well" will seek treatment at local medical facilities.

The storage tank will be lost, along with some sensitive control systems damaged by the freezing liquefied gas. The secondary devices will cause damage to other plant facilities and equipment in a 20-meter radius of the blasts as well. There will be hundreds, if not thousands, of auto accidents during the evacuation. In areas of heavy chlorine exposure, there will also be heavy corrosion of metal objects.

The plant will be temporarily closed due to bomb damage. Overwhelming demand will disrupt communications (landline telephone and cellular) in the local area. Significant disruptions in health care occur due to the overwhelming demand of the injured and the "worried well."

Decontamination, destruction, disposal, and replacement of major portions of the plant could cost millions. The local economy will be impacted by a loss of jobs at the facility if it is unable to reopen. An overall national economic downturn is possible in the wake of the attack due to a loss of consumer confidence.

Most of the injured will recover in 7 to 14 days, except for those with severe lung damage. These individuals will require long-term monitoring and treatment.

Mission Areas Activated:

Prevention/Deterrence/Protection – The ability to prevent the attack is contingent on the prevention of weapons acquisition, specifically IEDS, and site reconnaissance.

Emergency Assessment/Diagnosis – The presence of secondary devices will complicate assessment and identification efforts. Actions required include dispatch; chlorine detection; and hazard assessment, prediction, monitoring, and sampling.

Emergency Management/Response – Actions required include alerts, activation and notification, traffic and access control, protection of special populations, resource support and requests for assistance, and pubic information activities.

Incident/Hazard Mitigation – Mitigation measures will be complicated by secondary device concerns (i.e., delayed detonation of IEDs). Actions required include isolating and defining the hazard; establishing, planning, and operating incident command; firefighting; conducting bomb disposal dispatch and IED render-safe procedures; preserving the scene; performing mitigation efforts; decontaminating responders; and conducting site remediation and monitoring.

Public Protection – Evacuation and/or sheltering of downwind populations will be required.

Victim Care – Injuries to be treated will include respiratory difficulty or severe distress and/or vehicular accident trauma. Short- and long-term treatment may be required.

Investigation/Apprehension – Searching for suspects and evidence in an industrial area while wearing personal protective equipment (PPE) will be a significant challenge. Actions required include dispatch, site control, criminal investigation, pursuit and tactical deployment, and apprehension of suspects.

Recovery/Remediation – Since chlorine is a gas, the extent of decontamination required will be minor and largely related to any releases generated by secondary devices. Regardless, monitoring and sampling a large industrial facility will be a challenge. There will be significant damage to the plant as a direct result of the attack. Decontamination of waterways may present a significant challenge as well. Environmental impacts, especially public safety concerns, are likely to significantly delay rebuilding efforts.